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ABSTRACT

The 1989 document, "Curriculum and Evaluation Standards for School Mathematics" provides a vision and a framework for revising and strengthening the K-12 mathematics curriculum in North American schools and for evaluating both the mathematics curriculum and students' progress. When completed, the Addenda Series is expected to consist of 22 supporting books designed to interpret and illustrate how the vision could be translated into new classroom practices. Targeted at mathematics instruction in grades K-6, 5-8, and 9-12, the themes of problem solving, reasoning, communication, and connections are woven throughout the materials, as is the view of assessment as a means of guiding instruction. The goal of the "Connecting Mathematics" book in the 9-12 series is to link the content proposed in "Curriculum and Evaluation Standards" to that of current programs. "Connecting Mathematics" reflects the new methodologies and supplies classroom-ready activities suited for cooperative group work that require students to experiment, collect data, search for patterns, make conjectures, and verify discoveries with the solutions given in the appendix. A special "Try This" feature provides extra exercises, problems, and explorations for use with students. The captioned margin notes, "Teaching Matters" and "Assessment Matters", provide helpful instructional ideas for introducing topics, using calculators and computers, and assessing

student achievement. The chapters are: (1) Connecting with Functions; (2) Connecting with Matrices; (3) Data Analysis: A Context for Connections; (4) Building and Using Connections in Reasoning; and (5) Building and Using Connections in Problem Solving. (MDH)

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